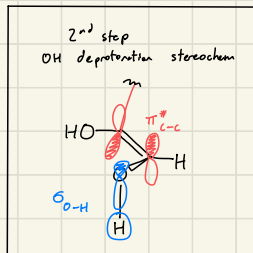
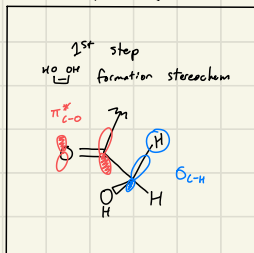


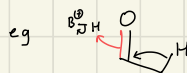
## Stereochem

- ① antibonding & bonding must be parallel
- ② closest 2 orbitals must be in phase

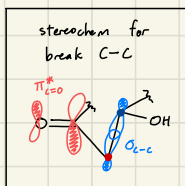
isomerase/flip thing!



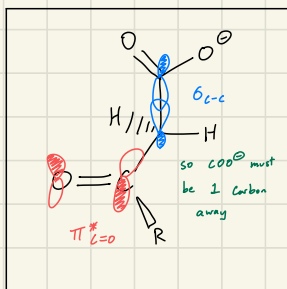
Find LUMO as final bond  
that breaks in substrate  
in arrow pushing



aldolase!

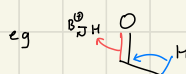


decarboxylation!

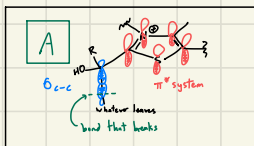
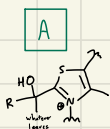


then corresponding bonding orbital e<sup>-</sup>'s

is next to LUMO  
(e<sup>-</sup> that pushed onto LUMO atoms)

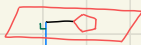


TPP!

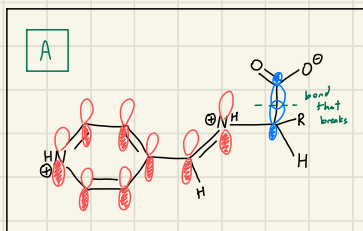


∴ Bond that breaks must

be ⊥ to plane of TPP

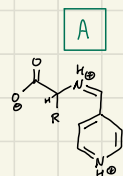
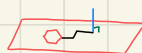


PLP!



∴ Bond that breaks must

be ⊥ to plane of PLP too



Note: ORBITALS are ⊥

(& since π\* is ⊥ to its bond (f-f))

BONDS/RINGS are ⊥

they'll prob  
only test the  
boxed ones